

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Courtney Herefords
91 Courtney Ln
Belle Fourche, SD 57717
2. Type of action: Change Application for Additional Stock Tanks 39F 30155158
3. Water source name: Unnamed tributary of Horse Creek
4. Location affected by project: Section 35, T7S, R61E; Section 31, T7S, R62E; Sections 1, 2, 11, 12, 13, 23, 24, 25, 26, 33, 34, and 35, T8S, R61E; Sections 5, 7, 8, 17, 18, 19, 20, 29, and 30, T8S, R62E, all in Carter County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicants propose to change Stockwater Permit 39F 30024765. This water right is for stock use from a pit/reservoir on an unnamed tributary of Horse Creek located in the SENENW Section 18, T8S, R62E, Carter County. Stock do not drink directly from the reservoir, which is fenced off. The reservoir is the main source of water for a pipeline system which supplies water to livestock throughout the ranch. The water is pumped from the reservoir through the pipeline system to stock tanks. The Applicant proposes to add 67 stock tanks that correspond to 52 new places of use to water right 39F 30024765 through this change authorization. When the Form 605 was filed, the Applicant only included one place of use at the location of the Reverse Osmosis (RO) shed in in the SWSENE Section 24, T8S, R61E. This is not actually a place of use but is mixing and distribution point for water feeding the pipeline system. The proposed change will add all tanks, hydrants, waterers, and portable tank locations supplied by the pipeline system and the place of use currently indicated on the water right will be removed through this change. Float/shut off valves will be used to control flow to the tanks. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

The new places of use are listed in the table below:

| | Quarter Sections | Govt Lot | Section | Township | Range |
|---|------------------|----------|---------|----------|-------|
| 1 | NENWSW | | 35 | 7S | 61E |
| 2 | SWNENW | | 31 | 7S | 62E |
| 3 | NWNESE | | 1 | 8S | 61E |
| 4 | NWNESE | | 2 | 8S | 61E |
| 5 | NENENE | | 11 | 8S | 61E |

| | | | | | |
|----|--|---|----|----|-----|
| 6 | SENWSE | | 11 | 8S | 61E |
| 7 | SWNE | | 12 | 8S | 61E |
| 8 | NENSW | | 12 | 8S | 61E |
| 9 | NESWNE | | 13 | 8S | 61E |
| 10 | NESWNW | | 13 | 8S | 61E |
| 11 | NENWSW | | 13 | 8S | 61E |
| 12 | SESWSE | | 13 | 8S | 61E |
| 13 | SESESE | | 13 | 8S | 61E |
| 14 | NESENE | | 23 | 8S | 61E |
| 15 | SESENE | | 23 | 8S | 61E |
| 16 | NENESE | | 23 | 8S | 61E |
| 17 | SENE (1 TANK, 1 WATERER) | | 24 | 8S | 61E |
| 18 | N2SENE (2 HYDRANTS, 2 TANKS, 8 WATERERS) | | 24 | 8S | 61E |
| 19 | NENWNE | | 24 | 8S | 61E |
| 20 | SESWNW | | 24 | 8S | 61E |
| 21 | NENSW | | 24 | 8S | 61E |
| 22 | SESESE | | 24 | 8S | 61E |
| 23 | NWSWSW | | 24 | 8S | 61E |
| 24 | SENE | | 25 | 8S | 61E |
| 25 | SESENE | | 25 | 8S | 61E |
| 26 | NWSESE | | 25 | 8S | 61E |
| 27 | SENWNW | | 25 | 8S | 61E |
| 28 | SENWNE | | 26 | 8S | 61E |
| 29 | SESWNE | | 26 | 8S | 61E |
| 30 | SWNWSE | | 26 | 8S | 61E |
| 31 | NESESE | | 33 | 8S | 61E |
| 32 | NWNESE | | 34 | 8S | 61E |
| 33 | NESENW | | 34 | 8S | 61E |
| 34 | NWSWSE | | 34 | 8S | 62E |
| 35 | NWSENW | | 35 | 8S | 62E |
| 36 | NESESW | | 5 | 8S | 62E |
| 37 | SWNESW | | 7 | 8S | 62E |
| 38 | NWNWSE | | 7 | 8S | 62E |
| 39 | NENWNW | | 8 | 8S | 62E |
| 40 | NESESW | | 8 | 8S | 62E |
| 41 | NESESW | | 17 | 8S | 62E |
| 42 | SWNE | | 18 | 8S | 62E |
| 43 | SESENW | | 18 | 8S | 62E |
| 44 | SESESW | | 18 | 8S | 62E |
| 45 | SW | 4 | 18 | 8S | 62E |
| 46 | SESWSE | | 19 | 8S | 62E |
| 47 | NESESE | | 19 | 8S | 62E |
| 48 | NW (1 TANK, 3 WATERERS) | 2 | 19 | 8S | 62E |

| | | | | | |
|----|--------|--|----|----|-----|
| 49 | SENWNE | | 20 | 8S | 62E |
| 50 | NENWNW | | 20 | 8S | 62E |
| 51 | NENWSW | | 29 | 8S | 62E |
| 52 | SWSENW | | 30 | 8S | 62E |

6. Agencies consulted during preparation of the Environmental Assessment:
 (include agencies with overlapping jurisdiction)
 Montana Department of Natural Resources and Conservation
 Montana Department of Fish, Wildlife, and Parks
 Montana Department of Environmental Quality
 Montana Sage Grouse Habitat Conservation Program
 Montana Natural Heritage Program
 United States Natural Resource Conservation Service
 United State Fish and Wildlife Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – The water source is a pit/reservoir on an unnamed tributary to Horse Creek which is a non-perennial source. Horse Creek is not included on the FWP list of dewatered streams. The proposed use will not increase the volume of water already appropriated through Stockwater Permit 39F 30024765 and will have no effect on water quantity.

Determination: No significant impact

Water quality – Horse Creek is not included on the Department of Environmental Quality 303(d) list. The proposed plan to add stock tanks to a water right for an existing reservoir on an unnamed tributary of Horse Creek will not impair water quality. The herd size will not increase under the proposed change so the volume of water used will not increase. There will be no change in the rate or timing of stock use. Only the place of use will change due to the addition of stock tanks. Water will be conveyed to the additional stock tanks through a pipeline so there will be no conveyance losses. The Applicant proposes to equip each stock tank with float/shut-off valves to control flow to the tanks and prevent overflow or waste of water.

Determination: No significant impact

Groundwater – The addition of stock tanks to this existing use of a stock pit/reservoir will not have an impact on groundwater.

Determination: No significant impact

DIVERSION WORKS - The pit/reservoir for Stockwater Permit 39F 30024765 was constructed in 2005 on an unnamed tributary of Horse Creek in the SENENW of Section 18, T8S, R62E, Carter County. A 25 GPM pump installed near the dam conveys water to the pipeline system. The stock watering system has been installed over time. The pipeline consists of 1-inch to 1.5-inch poly pipe, 1.5-inch to 2-inch PVC pipe, and 2-inch to 3-inch HDPE pipe. Some pipeline routes were designed by NRCS but most were installed by the Applicant. All pipelines are buried to a depth of 6 feet or more which ensures pipes are below the frost line. Booster pumps rated at 25 GPM assist with distribution of water through the system. Several types of tanks are utilized including portable tanks placed by hydrants, waterers in corrals, fiberglass tanks, rubber tire tanks, and concrete tanks. All tanks are equipped with 1-inch Apex water control valves. The pipeline system is already constructed and operational supporting that the means of diversion is adequate.

Determination: No significant impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – According to the Montana Natural Heritage Program, there are 11 animal species of concern in the proposed project area. Animal species of concern include Hoary Bat, Little Brown Myotis, Golden Eagle, Sprague’s Pipit, Great Blue Heron, Chestnut-collared Longspur, Greater Sage-Grouse, Bobolink, Loggerhead Shrike, Brewer’s Sparrow, and Sauger. The Bald Eagle is a special status species in the project area. The Montana Natural Heritage Program indicates that Lead Plant is a plant species of concern in the project area. According to the Montana Sage Grouse Habitat Conservation Map, this project is within core and general sage grouse habit. The project is consistent with the Montana Sage Grouse Conservation Strategy according to a letter from Carolyn Sime, Program Manager, dated April 22, 2021. The proposed project is consistent with the current stock use of land in the area and is not likely to impact threatened or endangered species or create barriers to migration or movement of fish or wildlife.

Determination: No significant impact

Wetlands –The additional stock tanks for this project are not located within the areas identified as wetlands by US Fish and Wildlife Service National Wetlands Inventory.

Determination: No significant impact

Ponds – The pit/reservoir associated with Stockwater Permit 39F 30024765 is located on an unnamed tributary of Horse Creek in the SENENW of Section 18, T8S, R62E, Carter County. This reservoir was constructed in 2005. The proposed project is to add additional stock tanks to the pipeline system served by the reservoir. There will be no change to the reservoir itself.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – This stock watering system covers an extensive area in T7S, R61E; T7S, R62E; T8S, R61E; and T8S, R62E, Carter County. The system consists of approximately 30 miles of pipeline and 67 stock tanks. According to the USDA Natural Resources Conservation Service, there is a broad range of soil types in the project area including loams, silty clay loams, clays, and Absher-Gerdrum complex soils. The addition of stock tanks on these soils is unlikely to cause significant impact on soil quality or stability.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – Existing vegetative cover in the area is rangeland. The addition of stock tanks will improve range management. The installation of pipelines and tanks may contribute to the establishment and spread of noxious weeds. It is the responsibility of the property owner to monitor for and implement measures for noxious weed control.

Determination: No significant impact

AIR QUALITY – The use of water from a pit/reservoir for stock purposes will not impact air quality.

Determination: No impact

HISTORICAL AND ARCHEOLOGICAL SITES – NA-project not located on State or Federal Lands.

Determination: Not applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - No additional demands on environmental resources are recognized.

Determination: No impact

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| HUMAN ENVIRONMENT |
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LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known locally adopted environmental plans or goals.

Determination: Not applicable

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – The proposed project is located on privately owned agricultural land. The project will not impact access to recreational or wilderness activities.

Determination: No impact

HUMAN HEALTH – No impacts to human health have been identified for the proposed irrigation project.

Determination: No impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes ___ No x ___ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts are recognized

Cumulative Impacts: No cumulative impacts are recognized

3. *Describe any mitigation/stipulation measures:* None

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The alternative to the proposed project is the no action alternative. The no action alternative prevents the property owner from improving efficiency of the watering system and improving range management practices. The no action alternative does not prevent or mitigate any significant environmental impacts.

PART III. Conclusion

1. ***Preferred Alternative:*** Issue the change authorization if the applicant proves the criteria in 85-2-402 MCA are met.

2. ***Comments and Responses:*** None

3. ***Finding:***
Yes__ No_x_ Based on the significance criteria evaluated in this EA, is an EIS required?

There are no significant impacts associated with the project so an environmental assessment is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Jill Lippard

Title: Water Resource Specialist

Date: 08/29/2022